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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/258, 123 02/26/99 BURGER

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EXAMINER

ROBINSON, G

ART UNIT PAPER NUMBER

2177

DATE MAILED:

11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

See attached Article.

HG

|                              |                               |                               |
|------------------------------|-------------------------------|-------------------------------|
| <b>Office Action Summary</b> | Application No.<br>09/258,123 | Applicant(s)<br>Berger et al. |
|                              | Examiner<br>Greta Robinson    | Art Unit<br>2177              |

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Aug 22, 2001

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1-84 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-84 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892)

18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

20)  Other: \_\_\_\_\_

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## DETAILED ACTION

1. Claims 1-84 are pending in the present application.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12, 40-53 and 68-84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, the following claim language is vague: "*converting the print queue into a plurality of viewable files*" [see claim 1 line 5]. It is unclear as to how a print queue can be converted into a plurality of viewable files. The Examiner suggests adding language that clarifies that the documents or data in the print queue are converted into a plurality of viewable files. Claims 2-12 are rejected based on dependency.

With respect to claim 40, the following claim language is vague: "*converting the print queue into a viewable file*" [see claim 40 line 10]. Claims 41-53 are rejected based on dependency.

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With respect to claim 40, the following claim language is vague: "*providing the viewable file, the highlighting information and the software on persistent storage*" [see claim 40 lines 14-15]. The sentence appears incomplete. The element performed in this sentence is unclear. Are the viewable files, highlighting information and software stored on persistent storage?

With respect to claim 68 the following claim language is vague: "*a persistent electronic storage medium having written thereon: (i) highlighting information representing a position of the selected item on the page ...*" [see claim 68 lines 4-6]. The term "having written thereon" is unclear. Is this computer program code stored on the persistent electronic storage medium?

Claims 69-84 are rejected based on dependency.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

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made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 13-39 and 68-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. US Patent 5,963,966 in view of Stern US Patent 6,161,107.

With respect to claim 13, **Mitchell et al.** teaches a persistent electronic storage medium for storing a document in electronic form, the document having a plurality of pages, the medium having written thereon:

- (A) plurality of viewable files, each file representing one of the pages of the document and preserving a printed format of said one of the pages [col.7 lines 42-53 “*Each HTML page (typically a separate file, but multiple pages can be accommodated in a single file*”];
- (B) an index representing an organization of the document [note “*indexing*” figure 2; col.2 lines 59-65 “*indexing schemes*”; col.7 lines 32-41; and col.13 line 64 through col.14 line 7]; and
- (C) software to view the viewable files and to search through the viewable files in accordance with the index [col.13 line 64 through col.14 line 24; col.1 lines 57-64; col.8 lines 61-67; and col.9 lines 7-32].

Although Mitchell teaches storing a document in electronic form as cited above; he does not explicitly specify the electronic storage medium is of the persistent type. Stern teaches that persistence is the mechanism for storing the state of a component that has been captured in one

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format such as by a scanner or fax and converted into another format to be viewed on a monitor for further analysis [see: col.11 lines 30-46; also note figure 7 and abstract]. It would have been obvious to one of ordinary skill at the time of the invention to have combined Stern with Mitchell et al because a persistent storage such as ROM would allow data captured to remain intact when the power to the device is turned off.

6. With respect to claims 14-16:

(Claim 14) wherein the viewable files are bitmap files [Mitchell et al., col.8 lines 19-35].

(claim 15) wherein the bitmap files have a compression applied thereto [Mitchell et al., col.9 line 33 through col.10 line 30; col.11 line 25 through col.12 line 121].

(Claim 16) wherein the compression is a lossy compression [Mitchell et al., note “lossy compression” col.10 lines 12-18; also see col. 11 line 25 through col.12 line 12].

7. With respect to claim 17:

wherein the document is organized under a plurality of headings; and

the index associates each heading with a page on which the heading appears [Mitchell et al., figure 4; also note figures 5 and 8; see col.7 lines 7-26; col.8 lines 5-18].

8. With respect to claims 18-20:

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(Claim 18) wherein the index associates each heading with a first page on which the heading appears [Mitchell et al., col.7 lines 42-67].

(claim 19) wherein the software comprises software to receive a typed name of a heading and to receive the page associated with that heading in the index [Mitchell et al., figure 5].

(Claim 20) wherein the software comprises software to show a list of headings, to receive a selection of a heading from the list and to retrieve the page associated with the heading in the index [Mitchell et al., figure 5 note table of contents].

9. With respect to claims 21 and 22:

(Claim 21) wherein the software is written in a device-independent language ..... and (Claim 22) wherein the device-independent language is JAVA [See: Stern col.10 line 47 through col. 11 line 23].

Although Mitchell et al. teaches the invention as cited above, they do not specify that the software is written in a device-dependent language. Stern teaches that the software is written in JAVA a device-independent language. It would have been obvious to one of ordinary skill at the time of the invention to have combined Mitchell and Stern because the system architecture provides a framework for interaction between different objects over the Internet by using HTTP Web servers and existing web browsers. Also the technology of the JAVA language enables one to communicate with other applications over the World Wide Web.

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10. With respect to claims 23 and 24:

(Claim 23) wherein the software is written to run within a World Wide web browser ...

(Claim 24) wherein a distribution file for the World wide Web browser is written on the medium [Mitchell et al., col.6 line 63 through col.7 line 14].

11. With respect to claim 25:

(A) a persistent electronic storage medium having written thereon [see Stern: col.11 lines 30-46; also note figure 7 and abstract];

(i) a plurality of viewable files, each viewable file representing one of the pages of the document and preserving a printed format of said one of the pages [Mitchell, col.7 lines 42-53  
*“Each HTML page (typically a separate file, but multiple pages can be accommodated in a single file”;*

(ii) an index representing an organization of the document [Mitchell, note “indexing” figure 2; col.2 lines 59-65 “indexing schemes”; col.7 lines 32-41; and col.13 line 64 through col.14 line 7; and

(iii) software to view the viewable files and to search through the viewable files in accordance with the index [Mitchell, col.13 line 64 through col.14 line 24; col.1 lines 57-64; col.8 lines 61-67; and col.9 lines 7-32]; and

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(B) a computer for accessing the medium, running the software and allowing the user to interact with the software [see: Mitchell et al., col.13 line 64 through col.14 line 24; col.1 lines 57-64; col.8 lines 61-67; and col.9 lines 7-32].

Although Mitchell teaches storing a document in electronic form as cited above; he does not explicitly specify the electronic storage medium is of the persistent type. Stern teaches that persistence is the mechanism for storing the state of a component that has been captured in one format such as by a scanner or fax and converted into another format to be viewed on a monitor for further analysis [see: col.11 lines 30-46; also note figure 7 and abstract]. It would have been obvious to one of ordinary skill at the time of the invention to have combined Stern with Mitchell et al because a persistent storage such as ROM would allow data captured to remain intact when the power to the device is turned off.

12. With respect to claims 26-28:

(Claim 26) wherein the viewable files are bitmap files [Mitchell, col.8 lines 19-35].

(claim 27) wherein the bitmap files have a compression applied thereto [Mitchell, col.9 line 33 through col.10 line 30]

(Claim 28) wherein the compression is a lossy compression [Mitchell, col.10 lines 12-18; col.11 line 25 through col.12 line 12].

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13. The limitations of claims 29-35 have been addressed above in claims 17-24; therefore they are rejected under the same rationale.

14. With respect to claims 36-39:

(Claim 36) the medium is installed on a server of a network; and the computer is connected to the network to access the medium on the server ... (Claim 37) wherein the network is a local area network ... (Claim 38) wherein the network is a virtual private network ... (Claim 39) wherein the network is the Internet [Note Mitchell et al cover figure and background of the invention col.1; the medium being installed on a network server or LAN is all within the scope of both Mitchell and Stern].

15. The limitations of claims 68-84 have been addressed above in claims 13-24 and 25-28, except for the following: a reverse side viewable file, highlighting, and viewing additional information such as a bill [Mitchell, col.9 lines 30-32, special formats col.7 lines 42-53; a browser is used on the network with the ability to link to additional material see figures 3, 5, 7, nd 9A].

16. Claims 1-9, 12, 40-50, 53-63, 66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. US Patent 5,963,966 in view of Barrett et al. US Patent 4,918,588.

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With respect to claim 1, **Mitchell et al.** teaches a method of providing a document in electronic form, the document having a plurality of pages, the method comprising:

- (C) providing page-heading data representing an organization of the document;
- (D) parsing the page-heading data to produce an index;
- (E) providing software to view the viewable files and to search through the viewable files in accordance with the index; and

(F) providing the plurality of viewable files, the index and the software in persistent storage [**Mitchell et al.**, figure 5, col.7 line 6 through col.8 line 36]. Although **Mitchell et al.** teaches the invention as cited above he does not specifically teach *step (a) a print queue for producing the document in a printed format and converting the print queue into a plurality of viewable files.* **Barrett et al.** teaches a print queue [see: figure 3 element (344, and 346); col.11 line 20 through col.12 line 20]. It would have been obvious to one of ordinary skill at the time of the invention to have combined **Mitchell et al.** and **Barrett et al.** because it would allow hard copies of the electronic documents to be printed.

17. With respect to claim 2:

the printing data in the print queue comprise data to be rasterized to produce the document;

step (b) comprises rasterizing the data to be rasterized; and

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the viewable files are bitmap files [Mitchell et al. see figure 1 “*Raster-to-Vector Conv Extract Text from Graphics*”; also note rasterizing the data is a part of the OCR or image process].

18. With respect to claims 3-5:

(Claim 3) wherein the data to be rasterized comprises PostScript data [Mitchell et al., inherent of process see figure 1].

(Claim 4) wherein step (b) comprises applying compression to the bitmap files [Mitchell et al., col.10 lines 12-18].

(Claim 5) wherein the compression is a lossy compression [Mitchell et al., col.10 lines 12-18].

19. With respect to claim 6:

the document is organized under a plurality of headings; and  
the index associates each heading with a page on which the heading appears [Mitchell et al., see figures 2-5].

20. With respect to claims 7-9:

(Claim 7) wherein the index associates each heading with a first page on which the heading appears [Mitchell et al., col.7 line 42 through col.8 line 35]

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(Claim 8) wherein the software comprises software to receive a typed name of a heading and to receive the page associated with that heading in the index [Mitchell et al., col.11 lines 5-33; col.13 line 64 through col.14 line 24].

(Claim 9) wherein the software comprises software to show a list of headings, to receive a selection of a heading from the list and to receive the page associated with that heading in the index [Mitchell et al., figures 4 and 5].

21. With respect to claim 12:

wherein the software is written to run within a World Wide Web browser [Mitchell et al., col.6 line 63 through col.7 line 14].

22. With respect to claim 40, a method of providing a page of a document in electronic form, the document having a plurality of pages with one or more items on each page, the page having a selected item thereon, the method comprising;

(A) providing page-heading data ... (b) parsing the page-heading data to determine a page on which the selected item is located and a position of the selected item on the page and to output highlighting information representing the position ... (c) providing a print queue of printing data for producing the document in a printed format ... (d) converting the print queue into a viewable file representing the page in said printed format, without an intermediary step of producing a hard copy of the page ... (e) providing software to view the viewable file and to highlight the position

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of the selected item on the page ... (f) providing the viewable file, the highlighting information and software on persistent storage [Mitchell et al., figure 4 lines 25-35; col.6 lines 51-58; col.9 lines 30-32 “clicking on the highlighted page”; note parsing col.7 lines 32-41; col.11 lines 7-9; also see figures 8 and 5; Note Barrett et al. teaches a print queue as cited under claim 1, see figure 3 element (344, and 346) and col.11 line 20 through col.12 line 20].

23. With respect to claim 41:

determining a reverse-side page corresponding to the page determined in step (b) ....  
[Mitchell et al., col.7 lines 42-53 “special formats”].

24. With respect to claim 42:

wherein the software comprises software for selectively viewing the viewable file either with or without the selected item highlighted [Mitchell col.9 lines 30-32].

25. With respect to claims 43-46:

(Claim 43) wherein the software comprises software for viewing additional material which is associated with the selected item but which is not included in the document ... (Claim 44)  
wherein the additional material comprises a bill associated with the selected item ...[note Mitchell, cover figure browser allows one to link to additional material];

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(Claim 45) wherein the additional material comprises a link to view the viewable file [Mitchell, figure 9];

(Claim 46) wherein the link permits selection of the viewable file with or without highlighting for the selected item [Mitchell, col.9 lines 30-32].

26. With respect to claims 47-50:

(Claim 47) the printing data in the print queue comprise data to be rasterized to produce the document ... [Mitchell et al. see figure 1 "*Raster-to-Vector Conv Extract Text from Graphics*"; also note rasterizing the data is a part of the OCR or image process].

(Claim 48) wherein the data to be rasterized comprises PostScript data [Mitchell et al., inherent of process see figure 1].

(Claim 49) wherein step (d) comprises applying compression to the bitmap file [Mitchell et al., col.10 lines 12-18].

(Claim 50) wherein the compression is a lossy compression [Mitchell et al., col.10 lines 12-18].

27. The limitations of claims 53-63, 66 and 67 have been addressed above in claims 12 and 40-50; therefore they are rejected under the same rationale.

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28. Claims 10, 11, 51, 52, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. US Patent 5,963,966 in view of Barrett et al. US Patent 4,918,588 as applied to claims 1-9, 40 and 54 and further in view of Stern US Patent 6,161,107.

Although Mitchell et al. and Barrett et al teach the invention substantially as cited in claims 1-9, 40 and 54, with respect to claims 10 and 11, they do not specify that the software is written in a device-dependent language. Note claims 10 and 11: “wherein the software is written in device-independent language” and (claim 11) “wherein the device-independent language is JAVA” [See: Stern col.10 line 47 through col. 11 line 23].

Stern teaches that the software is written in JAVA a device-independent language. It would have been obvious to one of ordinary skill at the time of the invention to have combined Mitchell, Barrett et al., and Stern because the system architecture provides a framework for interaction between different objects over the Internet by using HTTP Web servers and existing web browsers. The technology of the JAVA language enables one to communicate with other applications over the World Wide Web.

29. The limitations of claims 51, 52, 64, and 65 parallel claims 10 and 11; therefore they are rejected under the same rationale.

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30. In the response Applicant argued the following: (1) With respect to the following limitation “software to view the viewable files” ... “in accordance with the index”; the software is written on the medium. The passages cited do not identify any software written on the medium.

**In response** to argument (1) above, the features cited are taught by Mitchell et al. (Mitchell) teaches Omnipage professional software package to process the documents see col. 9 lines 18-24; also note Mitchell discusses algorithms to translate the documents at col. 1 lines 57-67. Indexing is shown in figure 2.

(2) Persistence storage is not taught.

**In response** to argument (2), Stern teaches persistent storage see col. 11 lines 3-46. The term “persistent storage” is intended to cover hard drives, optical and magneto-optical drives see applicant’s disclosure page 8 lines 1-6.

(3) Figure 5 does not teach claim 19 “type named of the heading” as cited.

**In response** to argument (3) above, a typed name of a heading is a feature of the HTML system of figure 5. Figure 7 depicts a typed name of a heading on a web page.

(4) Mitchell does not teach highlighting information representing a position of the selected item on the page.

**In response**, figure 7 depicts a selected item that has been highlighted.

(5) Mitchell does not show reverse side viewable file and the bill.

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**In response**, Mitchell teaches *special coding* of pages at col. 7 lines 42-53. The previous page or next page of the document may be shown. Mitchell does not show a bill as the additional material, but he does teach that the browser is able to link to additional information, cover figure.

*Conclusion*

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

32. Applicant's arguments filed August 22, 2001 have been fully considered but they are not persuasive.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greta Robinson whose telephone number is (703)308-7565. The examiner can normally be reached Monday through Friday from 9:30 AM to 6:00 PM. If any attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached at (703) 305-9790.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

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(703)746-7239, (for formal communications; please mark "EXPEDITED PROCEDURE") Or: (703)746-5657, (for informal or draft communications, please label "PROPOSED" or "DRAFT"). Hand delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)305-9600.



Greta Robinson

November 2, 2001